



MATERIAL SAFETY DATA SHEET  
(OSHA 29 CFR 1910.1200)  
FOR MASONRY CEMENT

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SECTION I - IDENTITY

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Manufacturer's Name and Address: Buzzi Unicem USA Inc.  
100 Brodhead Road  
Bethlehem PA, 18017  
Emergency Telephone Number: (800-424-9300) Chemtrec  
Information Telephone Numbers: (317) 706-3300  
(888) 422-2425  
Date of Preparation: 08/01/02  
Common Name and Synonyms: Masonry Cement, Hydraulic Cement  
Trade Name and Synonyms: Blue Bond® N, S, and M Masonry Cements  
Blue Bond® Colored Cement  
Blue Bond® White Masonry Cements

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SECTION II - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

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Chemical Family: Calcium Salts

Ingredients\*

Tri Calcium Silicate, $3\text{CaO} \cdot \text{SiO}_2$	(CAS #12168-85-3)
Di Calcium Silicate, $2\text{CaO} \cdot \text{SiO}_2$	(CAS #10034-77-2)
Tri Calcium Aluminate, $3\text{CaO} \cdot \text{Al}_2\text{O}_3$	(CAS #12042-78-3)
Calcium Aluminoferrite, a solid solution	(CAS #12068-35-8)
Gypsum $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$	(CAS #13397-24-5)

Limestone and small amounts of CaO, MgO,  $\text{Na}_2\text{SO}_4$  and  $\text{K}_2\text{SO}_4$  may be present.

\*Since masonry cement is manufactured from clinker, limestone, and other materials mined from the earth (shale, clay, sand, gypsum), and process heat is provided by burning fuels derived from the earth to make the clinker, trace but detectable amounts of naturally occurring metals, and possibly harmful elements may be found during chemical analysis. More than 0.1% free crystalline silica may be present.

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SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

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Solubility in Water - Slight (0.1 - 1.0%)

Specific Gravity - 2.85 to 3.00

Gray colored powder with no odor

The following properties are not applicable as masonry cement is a solid in powder form: boiling point, vapor pressure, vapor density, melting point, evaporation rate.

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

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Masonry cement is non-combustible and not explosive. Therefore there are no flammable or explosive limits, nor unusual fire and explosion hazards.

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## SECTION V - REACTIVITY DATA

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Masonry cement is stable.

Masonry cement is not incompatible with other materials, and will not decompose into hazardous by-products, and will not polymerize.

Keep masonry cement dry until used to preserve product utility.

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## SECTION VI HEALTH HAZARD DATA

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Masonry cement is classified as a nuisance dust by OSHA (Occupational Safety and Health Administration), MSHA (Mine Safety and Health Administration), and ACGIH (American Conference of Governmental Industrial Hygienists). As such, OSHA Permissible Exposure Limit is 5 mg/m<sup>3</sup> for respirable dust and 10 mg/m<sup>3</sup> for total dust; and for ACGIH total dust containing no asbestos and less than 1% silica, Threshold Limit Value is 10 mg/m<sup>3</sup>. Masonry cement is not known to cause cancer, however, free crystalline silica may be present at more than 0.1%. Free crystalline silica can cause cancer. Exposure to masonry cement can affect the skin, the eyes, and mucous membranes

Acute Exposure: Wet masonry cement, especially as an ingredient in plastic mortars or slurries, can dry the skin and cause severe alkali burns. Masonry cement dust can irritate the eyes and upper respiratory system.

Chronic Exposure: Masonry cement dust can cause inflammation of the lining tissue of the interior of the nose, and inflammation of the cornea. Individuals who are allergic to chromium may develop an allergic dermatitis. (Masonry cement may contain traces of chromium)

Emergency First Aid Procedures: Irrigate (flood) eyes immediately and repeatedly with clean water. Wash exposed skin areas with soap and water. Apply sterile dressings. Get prompt medical attention.

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## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

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If masonry cement is spilled, it can be cleaned up using dry methods that do not disperse dust into the air. Avoid breathing the dust. Emergency procedures are not required.

Masonry cement can be treated as a common waste for disposal, or returned to the container for later use if it is not contaminated or wet.

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## SECTION VIII - CONTROL MEASURES

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In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended.

Local exhaust can be used, if necessary, to control airborne dust levels.

The use of barrier creams or impervious gloves, boots, and clothing to protect the skin from contact with wet masonry cement is recommended.

Following work with masonry cement, workers should shower with soap and water.